

## STATUS OF CLAIMS

1. (Currently amended) A method for manufacturing a multifocal lens, comprising depositing on at least a portion of a surface of a lens substrate at least one layer of a surface forming amount of an inorganic high refractive index material, wherein the material is deposited under conditions suitable ~~to form~~ so that the material forms on the lens substrate surface a near vision zone, an intermediate vision zone, or a combination thereof.
2. (Currently amended) The method of claim 1, wherein the inorganic high refractive index material is deposited under conditions suitable ~~to form~~ so that the material forms the near vision zone and the intermediate vision zone.
3. (Previously amended) The method of claim 1, wherein the inorganic high refractive index material is deposited on the entire surface of the lens substrate.
4. (Previously amended) The method of claim 2, wherein the inorganic high refractive index material is deposited on the entire surface of the lens substrate.
5. (Previously amended) The method of claim 1, 2, 3, or 4, wherein the inorganic high refractive index material is selected from the group consisting of  $\text{Si}_3\text{N}_4$ ,  $\text{SiO}_x\text{N}_y$ ,  $\text{ZrO}_2$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Nb}_2\text{O}_5$ ,  $\text{MgO}$ ,  $\text{In}_2\text{O}_3$ - $\text{SnO}_2$ ,  $\text{HfO}_2$ ,  $\text{Y}_2\text{O}_3$ , diamond, diamond-like carbon, nitride and combinations thereof, wherein x is about 0 to about 2 and y is about 0 to about 1.33.
6. (Original) The method of claim 5, wherein the deposition is carried out so that a refractive index modulation is formed.
7. (Original) The method of claim 5, wherein the deposition is carried out so that a refractive index gradient is formed.

8. (Original) A multifocal lens produced by the method of claim 1, 2, 3 or 4.
9. (Original) A multifocal lens produced by the method of claim 5.
10. (Original) A multifocal lens produced by the method of claim 6.
11. (Original) A multifocal lens produced by the method of claim 7.
12. (Currently amended) A method for manufacturing a lens capable of correcting at least one higher order ocular aberration, comprising depositing on at least a portion of a surface of a lens substrate at least one layer of a surface forming amount of an inorganic high refractive index material, wherein the material is deposited under conditions suitable ~~to form so that the materials forms~~ a surface capable of correcting the at least one higher order optical aberration.
13. (Previously amended) The method of claim 12, wherein the inorganic high refractive index material is deposited on the entire surface of the lens substrate.
14. (Previously amended) The method of claim 12, wherein the inorganic high refractive index material is deposited on the entire surface of the lens substrate.
15. (Previously amended) The method of claim 12, 13, or 14, wherein the inorganic high refractive index material is selected from the group consisting of  $\text{Si}_3\text{N}_4$ ,  $\text{SiO}_x\text{N}_y$ ,  $\text{ZrO}_2$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Nb}_2\text{O}_5$ ,  $\text{MgO}$ ,  $\text{In}_2\text{O}_3$ - $\text{SnO}_2$ ,  $\text{HfO}_2$ ,  $\text{Y}_2\text{O}_3$ , diamond, diamond-like carbon, nitride and combinations thereof, wherein x is about 0 to about 2 and y is about 0 to about 1.33.
16. (Original) A multifocal lens produced by the method of claim 12, 13 or 14.
17. (Original) A multifocal lens produced by the method of claim 15.

18. (Previously added.) A multifocal lens, comprising a substrate and at least one layer of a surface forming amount of an inorganic high refractive index material deposited on at least a portion of a surface of the substrate, wherein the inorganic high refractive index material forms a near vision zone, an intermediate vision zone, or a combination thereof
19. (Previously added.) The lens of claim 18, wherein the inorganic high refractive index material is deposited on the entire surface of the lens substrate.
20. (Previously added.) The lens of claim 18 or 19, wherein the inorganic high refractive index material is selected from the group consisting of  $\text{Si}_3\text{N}_4$ ,  $\text{SiO}_x\text{N}_y$ ,  $\text{ZrO}_2$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Nb}_2\text{O}_5$ ,  $\text{MgO}$ ,  $\text{In}_2\text{O}_3$ - $\text{SnO}_2$ ,  $\text{HfO}_2$ ,  $\text{Y}_2\text{O}_3$ , diamond, diamond-like carbon, nitride and combinations thereof, wherein x is about 0 to about 2 and y is about 0 to about 1.33.
21. (Previously added.) The lens of claim 20, wherein the inorganic high refractive index material forms a refractive index modulation.
22. (Previously added.) The lens of claim 20, wherein the inorganic high refractive index material deposition forms a refractive index gradient.
23. (Previously added.) The lens of claim 18, wherein the multifocal lens is a progressive addition lens.
24. (Previously added.) The lens of claim 20, wherein the multifocal lens is a progressive addition lens.